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	tute for form 1449/PTC				Coi	mplete if Known
IN					Application Number	10/081,327
IN	ORMATIO	N DI	SELC	JSURE	Filing Date	02-21-2002
ST	ATEMENT	RY.	ΔPPI	ICANT	First Named Inventor	Huang
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	Useras many sn	eers as	necessary	人。接着對為繼	Examiner Name	Jeanine Anne Goldberg
Sheet	1	of	2		Attorney Docket Number	40629-2

Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (if known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
JG	A1	US-4,682,195	07-21-1987	Yilmaz	
ī	A2	US-4,683,202	07-28-1987	Mullis	
	A3	US-4,800,159	01-24-1989	Mullis et al.	
	A4	US-5,589,339	12-31-1996	Hampson et al.	
	A5	US-5,591,575	01-07-1997	Hampson et al.	
\sqrt{I}	A6	US-5,786,146	07-28-1998	Herman et al.	
V	Α/	US-5,071,947	- 02-10-1999	Duny	- du

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	™			
Initials*	No.'	Country Code 3-Number 4-Kind Code 5 (If known)	Date MM-DD-YYYY	Applicant of Cited Document	Or Relevant Figures Appear				

Cus-less	T CHO	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine,	T ²
Examiner Cite No. 1		journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	<u> </u>
JG	A8	AKOPYANTS et al., *PCR-based Subtractive Hybridization and Differences in Gene Content Among Strains of Helicobac pytori*, Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 13108-13113, 1998	
A9		ANTEQUERA, F., et al., "High Levels of De Novo Methylation and Altered Chromatin Structure at CpG Islands in Cell Lines", Cell, Vol. 2, pp. 503-514, 1990	
	A10	BAYLIN et al., "Alterations in DNA Methylation: A Fundamental Aspect of Neoplasia", Advances in Cancer Research, pp. 140-198, 1998	
	A11	BAYLIN, STEPHEN 8., "Tying it all Together: Epigenetics, Genetics, Cell Cycle, and Cancer", Science, Vol. 277, pp. 1948-1949, 1997	
	A12	BELINSKY et al., "Aberrant Methylation of p16 ^{thK4e} is an Early Event in Lung Cancer and a Potential Biomarker for Early Diagnosis", Proc. Natl. Acad. Sci. USA, Vol. 95, pp. 11891-11896, 1998	
	A13	BELINSKY et al., *Increased Cytosine DNA-methyltransferase Activity is Target-cell-specific and an Early Event in Lung Cancer*, Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 4045-4050, 1996	
	A14 BLOOM, H.J.G. AND RICHARDSON, W.W., "Histological Grading and Prognosis in Breast Cancer", British Journ Cancer, Vol. 11, pp. 359-377, 1957		L.
	A15	BRANDEIS, M. et al., "Sp1 Elements Protect a CpG Island from de novo Methylation", Nature, Vol. 371, pp. 435-438, 1994	<u> </u>
	A16 CAROTTI et al., *Influence of Pre-existing Methylation on the de Novo Activity of Eukaryotic DNA Methylation on the de Novo Activity of Eukaryotic DNA Methylation on the de Novo Activity of Eukaryotic DNA Methylation		
	A17	CHRISTMAN et al., "5-Methyl-2'-deoxycytidine in single-stranded DNA can act in cis to Signal de novo DNA Methylation", Proc. Natl. Acad. Sci., USA, Vol. 92, pp. 7347-7351, 1995	
	A18	CHUANG et al., "Human DNA-(Cytosine-5) Methyltransferase-PCNA Complex as a Target for p21WAF1*, Science, Vol. 277, pp. 1998-2000, 1997	
	A19	CRAIG et al., "Removal of Repetitive Sequences from FISH Probes Using PCR-Assisted Affinity Chromatography", Hum. Genet., Vol. 100, pp. 472-476, 1997	
	A20	CROSS et al., "Purification of CpG Islands Using a Methylated DNA-Binding Solumn", Nature Genet., Vol. 6, pp. 836-344,	du
	A21	FROMMER, M. et al., "A Genomic Sequencing Protocol that Yields a Positive Display of 5-Methylcytosine Residues In Individual DNA strands", Proc. Natl. Acad. Sci. USA, Vol. 89, pp. 1827-1831, 1992	
V	A22	GRAFF et al., "Mapping Patterns of CpG Island Methylation in Normal and Neoplastic Cells Implicates Both Upstream and Downstream Regions in <i>de Novo</i> Methylation", J. Biol. Chem., Vol. 272, No. 35, pp. 22322-22329, 1997	

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Complete if Known				
Application Number	10/081,327			
Filing Date	02-21-2002			
First Named Inventor	Huang			
Art Unit	1634			
Examiner Name	Jeanine Anne Goldberg			
Attorney Docket Number	40629-2			

Initials* No. 1 journal, serial, symposium, catalog, number(s), publisher, city and/ A23 HERMAN et al., "Methylation-specific PCR: A Novel PCR Assa Sci. USA, Vol. 93, pp. 9821-9826, 1996		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
		HERMAN et al., "Methylation-specific PCR: A Novel PCR Assay for Methylation Status of CpG Islands", Proc. Natl. Acad. Sci. USA, Vol. 93, pp. 9821-9826, 1996			
	A24	HUANG, T.H., et al., "Methylation Profiling of CpG Islands in Human Breast Cancer Cells", Human Molecular Genetics, Vol. 8, No. 3, pp. 459-470, 1999			
	A25	JONES, P.A., *DNA Methylation Errors and Cancer*, Cancer Res., Vol. 56, pp. 2463-2467, 1996	L		
	A26	LAIRD et al., "DNA Methylation and Cancer", Hum. Mol. Genet., Vol. 3, pp. 1487-1495, 1994			
A27 LEE J.H. and WELCH D.R., "Identification of High Malignant Melanoma Hybrid Cells Using Subtracti 1044, 1997 A28 LI et al., "Role for DNA Methylation in Genomic Im-		LEE J.H. and WELCH D.R., *Identification of Highly Expressed Genes in Metastasis-Suppressed Chromosome 6/Human Malignant Metanoma Hybrid Cells Using Subtractive Hybridization and Differential Display*, Int. J. Cancer, Vol. 71, pp. 1035-1044, 1997			
		Li et al., "Role for DNA Methylation in Genomic Imprinting", Nature, Vol. 366, pp. 382-365, 1993	L		
		MUMMANENI, P., et al., "Epigenetic Gene Inactivation Induced by a Cis-acting Methylation Center", J. Biol. Chem., Vol. 270, No. 2, pp. 788-792, 1995			
	A30	PFEIFER, G.P., et al., "Polymerase Chain Reaction-Aided Genomic Sequencing of an X Chromosome-linked CpG Island: Methylation Patterns Suggest Clonal Inheritance, CpG Site Autonomy, and an Explanation of Activity State Stability", Proc. Natl. Acad. Sci. USA, Vol. 87, pp. 8252-8256, 1990			
	A31	SAIKI et al., "Primer-Directed Enzymatic Amplification of DNA with a Thermostable DNA Polymerase", Science, Vol. 239, pp. 487-491, 1988	L		
	A32	SCHENA et al., "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray", Science, Vol. 270, pp. 467-470, 1995			
	A33	SINGER-SAM, J. and RIGGS, AD., "X-Chromosone Inactivation and DNA Methylation", DNA Methylation: Molecular Biology and Biological Significance, pp. 358-384, 1993	L		
	A34	VERTINO et al., "De Novo Methylation of CpG Island Sequences in Human Fibroblasts Overexpressing DNA (Cytosine-5) – Methyltransferase", Mol. Cell Biol., Vol. 16, pp. 4555-4565, 1996			
		WU et al., "Expression of Prokaryotic <i>Hha</i> l DNA Methyltransferase is Transforming and Lethal to NIH 3T3 Cells", Cancer Res., Vol. 56, pp. 616-622, 1996			

Examiner Signature	/Jeanine Goldberg/	Date Considered	04/26/2006

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